Video Enhancement

Motion blur is everywhere!

$$g = d * f + w$$

$$\downarrow$$
$$d > 0$$

点扩散函数：物理特性
point-spread function

No blur

$$d = \delta = \begin{cases} 1 & , n_1 = n_2 = 0 \\ 0 & , otherwise. \end{cases}$$

$$g \approx f + w$$

Deep Video Deblur

Encoder-Decoder Structure.

==Water / Air Turbulence effect Remove==

$$Video \xrightarrow[\text{Low-rank Decomposition}]{\text{Non-Rigid Registration}} \quad 非刚性整流? \quad Reference\ image$$

Reference image
↺
Superfast
Refinement
NLTV & TV

Deblurring

↓

Recovered Image